# MIKE H. LIU

714 W. Elm St. Unit 2, Urbana, IL 61801 • (626)-512-6236 • mikeliu8492@gmail.com **LinkedIn**: https://www.linkedin.com/in/mikeliu8492 • **GitHub**: https://www.github.com/mikeliu8492

**Personal Website**: https://mikeliu8492.herokuapp.com

## **EDUCATION**

University of Illinois Urbana-Champaign - Champaign, IL

B.S. Computer Science

Medical College of Wisconsin - Milwaukee, WI

M.D. Medicine

Johns Hopkins University – Baltimore, MD

M.S. Cellular and Molecular Biology, B.A. Biology

August 2015 – May 2018 **GPA: 3.75/4.00** 

August 2010 – March 2013 (Withdrew)

August 2004 – May 2009

GPA: 3.73/4.00

#### WORK EXPERIENCE

#### Microsoft - Redmond, WA

May 2017 - August 2017

Software Development Engineer Intern – Windows Servicing and Delivery Group

- Developed in C# proof-of-concept web service to efficiently retrieve and process Microsoft Graph API active directory data for
  proper ingestion into Operations Management Suite (OMS) Platform log streams, thus identifying specific device organization
  roles with their update telemetry data snapshots to help minimize business downtime for Windows 10 update deployments.
- Re-engineered Update Compliance TypeScript application query generation and data parsing functions to accommodate new query capabilities of OMS Platform Kusto Query Language. Wrote clear and detailed documentation on application modification best practices that facilitates completion of application migration by team well before general release deadline.

## Intelligent Medical Objects - Champaign, IL

May 2016 - May 2017

SQL Developer/Mapping Analyst Intern – Clinical Terminology Mapping Team

- Created 60+ ad-hoc Oracle SQL reports to help team organize over 9,000 proprietary concepts by quality assurance issues in IMO clinical content to ensure compliance with best HIM professional editorial guidelines and aid clinicians' documentation experience.
- Designed pilot user interface, corresponding queries, and backend table update procedure on Confluence Wiki to improve terminology mapping team efficiency by enabling customizable data filters in Oracle SQL for team productivity metrics reports.

## **SKILLS**

- Proficient: C#, SQL, C++, C, Java, Confluence, Python, SVN
- Basic Knowledge: HTML, CSS, JavaScript, Bootstrap, TypeScript, Node, React, Git, TFS

## PROJECTS AND ACTIVITIES

## NYCMortality.herokuapp.com

August 2017 - Present

 Website coded in Node, Express, React, and Bootstrap to visualize leading causes of mortality data in New York Metropolitan area by race/gender as obtained by data.gov API dataset from the New York Department of Health and Mental Hygiene.

# Abstract Language Integrated Query (ALIQ) - Microsoft One Week Hackathon Project

July 2017 – Present

- Contributor to open-source .NET DLL for database query logic agnostic of backend to be written in standard C# syntax.
- Implemented library file handler functionality to read/write table data into null-separated variable files for persistent storage.
- Developed unit tests for business logic demonstration using both C# native variables and converted web API JSON data.

Minesweeper 2.0 November 2016

- Personally coded a game in Java utilizing Javax. Swing library to explore and further build on classic Windows game.
- Implemented new custom functionalities like scoring algorithm that evaluates on game difficulty and time to completion.

#### **Intelligent Medical Objects Peer Mentor**

May 2016 - October 2016

- Mentored co-worker on her medical school application essays to best advance her candidacy.
- Conducted mock interviews and provided feedback on presentation to promote co-worker's interest in STEM, and our collaboration
  resulted in my co-worker attaining admission to a medical school of her choice.

## RELEVANT COURSEWORK

- Algorithms and Models of Computation
- Database Systems
- Data Structures
- System Programming

- The Art of Web Programming
- Artificial Intelligence
- Bioinformatics
- Text Information Systems

#### HONORS AND AWARDS

- 2017 Microsoft Tuition Merit Scholarship
- Tau Beta Pi Engineering Honor Society